

ABSTRACT

SENSITIVITY OF ULTRASOUND AND SERUM CA125 ESTIMATION IN DIAGNOSIS OF ADNEXAL MASSES AND ITS HISTOPATHOLOGICAL CORRELATION

INTRODUCTION : Adnexal masses are a common gynaecological problem, a common cause for morbidity and mortality in female population. Around 5- 10% of women undergo surgery for suspicious adnexal masses and out of that less than 25% found to be malignant. Here in present study out of 110 cases only 11 (10%) were found malignancy.

AIM AND OBJECTIVES To know the sensitivity, specificity and reliability of Ultrasonography and CA 125 in diagnosis(evaluation) of adnexal masses and to assess malignant potential of adnexal mass by using Ultrasound and CA125.

MATERIALS AND METHODS : This study includes those with clinical suspicion of adnexal masses and incidentally detected adnexal masses on ultrasonography admitted to GTMCH ,Theni **Study Setting-** This prospective study was conducted in Department of Obstetrics and Gynaecology, Govt. Theni Medical College Hospital , Theni **Duration of the study-** One and half year study January 2015 to June 2016 **Sample size -** The study were conducted on 100 cases admitted with adnexal masses.

RESULTS : Out of 110 cases 96 (87.27%%) cases were benign, 3(2.72%) cases were borderline and 11 (10%) cases were malignant. 91cases (82.72%) were of ovarian origin, 8 cases (7.27%) were tubal origin, 7 cases (6.36%%)were uterine origin, 2cases (1.81%)from broad ligament and 2 cases(1.81%) were from other adjacent structures. 28 cases (25.45%%) were in the age group of 30-39yrs, 26 cases (23.63%) were in 40-49yrs, 22 cases(20%) in 20-29yrs and 14 cases(12.72%) in 50-59yrs and 15cases (13.63%) above 60yrs with 5cases(4.54%%) seen in <20yrs . With the help of USG adnexal mass characteristics were noted – Tumor size, multiloculation, multiseptation, cyst wall, papillary projection, presence of solid components and ascites, bilaterality and extraovarian metastasis. An score was given 1 for none of the features and 3 for having 2 or more features. Serum CA 125 was measured in around 75 cases. Premenopausal women were scored as 1 and postmenopausal women were scored as 3. Sensitivity of USG for detection of malignancy was 86.67% specificity was 65.00 %

CONCLUSION : Ultrasonography features can be used to differentiate benign and malignant adnexal masses. The sensitivity is increased when combined with CA125.

The malignant potential of adnexal mass can be better assessed using Ultrasound and CA125 rather than Ultrasound alone. Mostly ovarian masses presents as adnexal masses. Serous cystadenoma being more common than mucinous cystadenoma. Very rarely associated with tubal pathology which is diagnosed usually intraoperatively. RMI- Risk of Malignancy Index is a multimodal approach, easy to perform and to evaluate ovarian tumor preoperatively and is used to discriminating benign and malignant ovarian tumor. The optimal cut off point that distinguishes benign and malignant ovarian mass for RMI is 200. RMI > 200 in 14 cases, out of which 9 cases were malignant,1 case borderline.

Sensitivity with USG was 86.67%, specificity 65% and sensitivity with CA125 only 59.18%, specificity of 53.85%. When USG combined with CA125 sensitivity was increased to 90% with specificity of 86.96%. This shows adnexal structure malignancy can be better predicted with USG combined with CA125.

KEY WORDS : ADNEXAL MASS, TORSION OF CYST, SEROUS CYST ADENOMA, SEROUS CYST ADENO CARCINOMA, MUCINOUS CYST ADENOMA, ADENOMA CARCINOMA